

CRATE

TD-70

TUBE DRIVEN GUITAR AMPLIFIER



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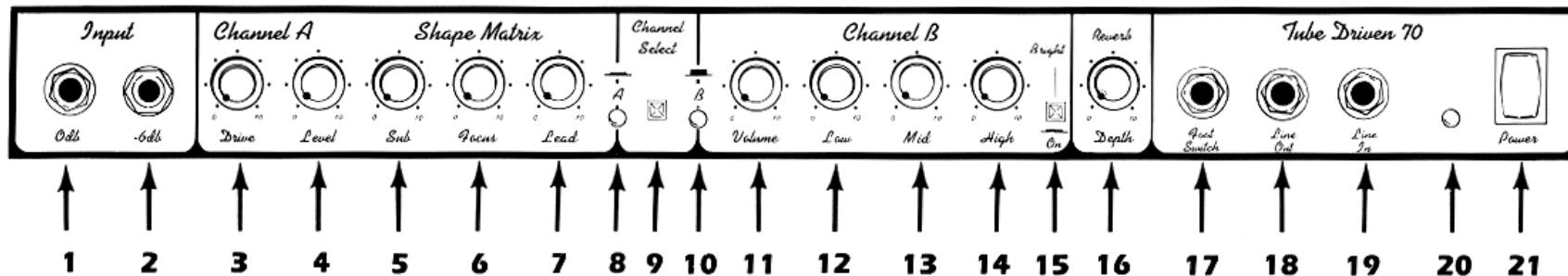
We would like to take this opportunity to thank you for selecting a Crate product, and to tell you of our commitment to the design and manufacture of only the finest musical instrument amplification equipment; built for you, the musician.

You have purchased one of the most innovative sound amplification devices available today. Your Crate amplifier gives you more performance features than ever before; features that you, the musician, have asked for.

Your Crate amplifier is an American product, manufactured at our factory in St. Louis, Missouri. Only the finest available components and materials are used in the manufacture of each amplifier.

All Crate amplifiers are subjected to seven or more inspection and testing steps to assure you of a high quality product. The final test for each amp is conducted by a trained musician with the instrument for which the amp was designed. Any unit that does not meet the standards of our musician's discriminating ear will not be passed.

Since all Crate products are designed, developed, and manufactured through the cooperative efforts of engineers and professional musicians, the end result is a product that responds to the musician's audio requirements, and a product that will serve your needs for years to come.



FRONT PANEL-INPUT SECTION

1. **0dB Input Jack** accepts a standard 1/4" phone plug and is suited for any low to line level signal source.
2. **-6dB Input Jack** is a padded 6dB for accepting hotter inputs. If both jacks are used, this input is not padded and will be equal to the 0dB input.

CHANNEL A CONTROLS

3. **Drive** adjusts the level at which the 12AX7 tube is driven. This control allows a full distortion range: minimal distortion at 0 - thick blues distortion at 5 - and full blown metal crunch at 10.

4. **Level** controls the overall volume of Channel A.
5. **Sub** adjusts the amount of low frequency tone in Channel A.
6. **Focus** adjusts the general tone of Channel A. Counterclockwise emphasizes mid-range frequencies and clockwise emphasizes low and high frequencies.
7. **Lead** adjusts the amount of high frequency tone or "presence" in Channel A.

CHANNEL SWITCHING CONTROLS

8. **The Red LED** is the Channel A indicator.

9. **The Channel Select** switch controls channel switching. It is disabled if an external footswitch is used in the footswitch jack (#17).

10. **The Green LED** is the Channel B indicator.

CHANNEL B CONTROLS

11. **Volume** sets the overall volume level of Channel B.
12. **Low** controls the amount of bass in the clean Channel B.
13. **Mid** allows attenuation and boosting of the mid range.
14. **High** controls the upper frequency tone of Channel B. Used in conjunc-

tion with the bright switch (#15), a very wide range of treble control for Channel B is possible.

- 15. Bright** affects the brilliance of the Channel B signal by accentuating additional upper frequencies.

REVERB SECTION

- 16. Reverb Depth** allows the apparent acoustical qualities of a room to be altered. The TD-70 response can be transformed from a normally dry, "flat" sound in the counterclockwise position to that of a concert hall when rotated clockwise.

FOOTSWITCH SECTION

- 17. The Footswitch Jack** is to be used with the Channel Selector/Reverb footswitch. It is designed to light a footswitch with Channel Select and Reverb On LED's.

EFFECTS LOOP

- 18. The Line Out Jack** is used to link the TD-70 to additional amplifiers or to connect the amp to a tape recorder. Simply run a cable from the output of this jack to the input of another amplifier or tape deck. External

speakers cannot be hooked up to this jack.

- 19. The Line In Jack** is used as a direct input to the power amp. It can be used in conjunction with the Line Out jack to complete the effects loop. When this jack is used, the signal to the power amp from the pre-amp is defeated.

POWER

- 20. The On/Off LED** is lit when the power to the amplifier is on.
- 21. The On/Off Switch** applies power to the unit

REAR PANEL FEATURES

- 22. The Auxiliary Speaker Input Jack** (not shown) accepts a 1/4" speaker cable from any external speaker configuration. The external speakers must be rated minimally 8 ohms.

The TD-70 is equipped with a heavy-duty grounded three-wire power cord. Be sure this cord is properly plugged into a safely wired grounded 120 volt, 60Hz AC power outlet before use. (If your TD-70 was purchased outside the United States, refer to the rear panel for power ratings).

For your safety, never attempt to defeat the ground connection on this cord.

TD-70 TECHNICAL SPECIFICATIONS

Output Power Rating	70 watts RMS @ 5% THD 8 ohm minimum load
Speaker Size and Rating	TD-70 Custom Design 12" TD-70S Celestion G12M-70 12"
Input Impedance	230K ohms/"0dB" input 242K ohms/" - 6dB" input
Maximum Input Signal	5 volts, p-p/"0dB" input
Level Accepted	10 volts, p-p/" - 6dB" input
Total System Gain	Channel A: 100dB @ 1KHz all controls at "10" Sub, Focus, Lead @ "0" Channel B: 81dB @ 1KHz all controls at "10" Bright off
Signal to Noise Ratio	Channel A: 42dB with all controls at "10" Sub, Focus, Lead @ "0" Channel B: 63dB with all controls at "10" Bright off
Sub Control	9dB Boost @ 80Hz
Focus Control	Proprietary circuit
Lead Control	9dB Boost @ 3KHz
Low Control	10dB Range @ 100Hz
Mid Control	15dB Range @ 500Hz
High Control	15dB Range @ 7KHz
Input Power Requirements	120VAC, 60Hz, 200 watts max
Preamp Tube	12AX7
Cabinet Size and Weight	17-1/2"H x 20-1/4"W x 9-3/4"D, 34 lbs.

Specifications subject to change without notice.

CAUTION: To reduce the risk of electric shock, do not open chassis. No user serviceable parts inside. Refer servicing to qualified service personnel.

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